

DOCKET NO. D-1975-028 CP-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Pen Argyl Municipal Authority
Wastewater Treatment Plant
Borough of Pen Argyl, Northampton County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by ARRO Engineering and Environmental Consultants on behalf of Pen Argyl Municipal Authority on October 17, 2011 (Application), for renewal of a wastewater treatment plant (WWTP) approval. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0037052-A1 for the project discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on March 1, 2012.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on July 11, 2012.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew the approval of the docket holder's existing 0.95 million gallons per day (mgd) Pen Argyl Municipal Authority WWTP.
- 2. Location.** The project WWTP is located off the intersection of Delabole and Middle Town Roads in the Borough of Pen Argyl, Northampton County, Pennsylvania. The WWTP will continue to discharge treated domestic wastewater to unnamed tributary of Waltz Creek within the drainage area of the Lower Delaware River at River Mile 190.65 - 4.7 - 4.1 - 0.6 (Delaware River - Martins Creek - Waltz Creek - UNT Waltz Creek). The WWTP discharge is located in the drainage area to the Lower Delaware Special Protection Waters (SPW) area.

The WWTP outfall is located in the Martins Creek Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40 ° 52' 31"	75 ° 15' 13"

3. Area Served. The docket holder's WWTP serves the Borough of Pen Argyl and portions of Plainfield and Washington Townships, all located within Northampton County, Pennsylvania. No expansion of WWTP capacity or service area is proposed.

Previously, under an agreement with the Grand Central Sanitary Landfill (GCSL) located in Plainfield Township, the Pen Argyl Municipal Authority WWTP received pre-treated leachate from the GCSL Leachate Treatment Plant (LTP). The docket holder indicated in their Application that pre-treated leachate from the GCSL LTP is not presently conveyed to the Pen Argyl Municipal Authority WWTP since currently there is no agreement for the WWTP to receive the pre-treated leachate from the GCSL LTP; however, the docket holder indicated that the agreement may be reinstated in the future.

For the purpose of defining the Area Served, sections B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. Physical Features.

a. Design Criteria. The docket holder's 0.95 mgd WWTP treats domestic sanitary wastewater through a sequencing batch reactor (SBR).

b. Facilities. The existing facilities consist of influent pumping, a fine screen and vortex-type grit chamber, five (5) SBRs, two (2) post-equalization tanks and cascade aeration ultra-violet light (UV) disinfection system.

The facility includes sludge handling facilities in the form of a primary aerobic digester, two (2) secondary aerobic digesters and eight (8) reed beds.

Prior facilities and processes for the WWTP have been described in DRBC Docket No. D-1975-028 CP-2, approved by the DRBC on May 10, 2007.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The Pen Argyl Municipal Authority WWTP has a diesel powered generator installed capable of providing emergency power supply. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day; however the facility has alarms on process controls, equipment and power failure and calls personnel when any alarm condition is triggered, so that staff is available 24 hours per day at the Pen Argyl Municipal Authority. (SPW)

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements. (SPW)

The docket holder's existing WWTP does not discharge to Outstanding Basin Waters (OBW), and is not required to have a non-visible discharge plume. (SPW)

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State approved) facility.

The project facilities are not located in the 100-year floodplain.

c. **Water Withdrawals.** The potable water supply in the project service area is provided by the Pennsylvania American Water Company (PAWC) and some individual wells. The PAWC surface and ground water withdrawals are described in detail within Docket No. D-81-50 CP RENEWAL, which was approved by the DRBC on December 14, 1988. In addition, the Green Waltz Water Company/Nestle Waters North America Inc. provides commercially bottled water to the service area from its local water supply, which is described in Docket No. D-1998-055-5 and approved on December 8, 2011.

d. **NPDES Permit / DRBC Docket.** The PADEP issued draft NPDES Permit No. PA0037052-A1 on March 1, 2012 which includes final effluent limitations for the project discharge of 0.95 mgd to surface waters classified by the PADEP as MF-CWF (Migratory Fishery – Cold Water Fishery). The following average monthly effluent limits are among those listed in the NPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES permit.

OUTFALL 001 (Discharge to unnamed tributary of Waltz Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required in the NPDES permit
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required in the NPDES permit
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal*)	As required in the NPDES permit
Total Suspended Solids	30 mg/l (85% minimum removal*)	As required in the NPDES permit
Total Dissolved Solids	1,000 mg/l	As required in the NPDES permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml as a geo. avg. 2,000 colonies per 100 ml as a geo. avg.	As required in the NPDES permit
Ammonia-Nitrogen (5-1 to 10-31) (11-1 to 4-30)	1.5 mg/l 4.5 mg/l	As required in the NPDES permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES permit.

OUTFALL 001 (Discharge to unnamed tributary of Waltz Creek)		
PARAMETER	LIMIT	MONITORING
Nitrate-Nitrogen	Monitor and Report	Monthly
Total Nitrogen	Monitor and Report	Monthly
Total Phosphorous	Monitor and Report	Monthly

e. **Relationship to the Comprehensive Plan.** The existing Pen Argyl Municipal Authority WWTP was added to the Comprehensive Plan on July 20, 1966, as described in Docket D-1966-109 CP-1. An expansion of the WWTP to treat 1.55 mgd was approved on April 23, 1975 via Docket No. D-1975-028 CP-1, but the project was not constructed. Docket No. D-1975-028 CP-1 had no expiration date, but the approval of Docket No. D-1975-028 CP-2 terminated the docket. The approval of Docket No. D-1975-028 CP-3 will terminate D-1975-028 CP-2.

B. FINDINGS

The docket holder submitted an Application to renew the approval of the existing 0.95 mgd Pen Argyl Municipal Authority WWTP on October 17, 2011. This docket (D-1975-028 CP-3) renews the DRBC approval.

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC Water Quality Regulations (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Lower SPW)

On July 16, 2008, the DRBC approved amendments to its WQR that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program. (Lower SPW)

The docket holder's WWTP discharges to the drainage area to the Lower Delaware River SPW area.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the applicant's service area which is also located within the drainage area of Special Protection Waters. The service area of the docket holder is located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities and/or service area (i.e., there are not any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition II.n. has been included in the Decision section of this docket.

The Borough of Pen Argyl is regulated by the PADEP as a Stormwater Phase II municipality and is permitted by PADEP as such. The Borough of Pen Argyl adopted and implemented a stormwater ordinance in accordance with the PADEP requirements. The PADEP Stormwater Phase II requirements satisfy the NPSPCP requirements of the Commission.

Near the project site, the unnamed tributary of Waltz Creek has a seven-day low flow with a recurrence interval of ten years of 0.2 mgd (0.4 cfs). The ratio of this low flow to the average design wastewater discharge from the upgraded plant is 0.2 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is the City of Easton's Water Treatment Plant on the Delaware River, approximately 17 miles downstream from the docket holder's WWTP discharge.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Water Quality Regulations of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-1975-028 CP-3 below, Docket No. D-1975-028 CP-2 is terminated and replaced by Docket No. D-1975-028 CP-3.

II. The project and appurtenant facilities as described in the Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *Water Quality Regulations* of the DRBC.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a

docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F. (Trout Waters only)

i. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served section of this docket, which incorporates by reference sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION section.

j. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

k. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

m. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

n. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

o. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for

renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

q. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

r. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

s. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact (“Compact”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

t. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED: July 11, 2012

EXPIRATION DATE: August 31, 2016